

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A message broker for transmitting a message from a first client system to a second client system, the message broker comprising at least one message channel, a first channel adapter and a second channel adapter,
the first channel adapter being operable to;
receive a message from the first client system encoded in an Internet protocol and comprising content information and destination information,
read the destination information from the message, and send a push request to place the message in a message channel corresponding to the destination information,
the second channel adapter being operable to;
receive a message request from the second client system encoded in an Internet protocol and comprising source information
read the message request and identify a message channel corresponding to the source information,
send a pull request to the message channel, and
generate a response accordingly.
2. (original) A message broker according to claim 1 wherein the second channel adapter is operable to generate a response comprising a time out response if no message is placed in the channel within a predetermined time period.
3. (Previously presented) A message broker according to claim 1 wherein, when a message is placed in the channel, the second channel adapter is operable to generate a response comprising at least the content information.

4. (Previously presented) A message broker according to claim 1 wherein the second channel adapter is operable to generate a response encoded in an Internet protocol format.
5. (Previously presented) A message broker according claim 1 wherein the first channel adapter and the second channel adapter are each implemented by a servlet.
6. (Previously presented) A message broker according to claim 1 comprising an address information store wherein channel information corresponding to at least one of the destination information and source information is stored.
7. (Previously presented) A message broker according to any claim 1 comprising a bi-directional communication link, the message broker comprising two message channels, each channel comprising a first channel adapter and a second channel adapter, such that the message broker is operable to transmit messages from the first client to the second client system using one of the channels and from the second client system to the first client system using the other of said channels.
8. (Original) A message broker according to claim 7 wherein the first channel adapter of one of the channels and the second channel adapter of the other of the channels are provided by a common combined channel adapter module.
9. (Previously presented) A message broker according to any claim 1 wherein the message and the request are encoded in HTTP format.
10. (Original) A message broker according to claim 9 wherein the message comprises a HTTP POST request.
11. (Previously presented) A message broker according to claim 9 wherein the message request comprises a HTTP GET request.

12. (Canceled)

13. (Currently amended) A ~~transmission module~~ communication system according to claim ~~12~~ 25 wherein the message is encoded in HTTP format and transmitted to the message broker using a HTTP POST request.

14. (Currently amended) A ~~client~~ communication system ~~provided with a transmission module~~ according to claim ~~12 and~~ 25 wherein the client system comprises a firewall, wherein the message is permitted to pass through the firewall.

15. (Canceled)

16. (Currently amended) A ~~receiver module~~ communication system according to claim ~~15~~ 26 wherein, where the response comprises a time out response, the receiver module is operable to generate an output comprising re-transmitting the message request to the message broker.

17. (Currently amended) A ~~receiver module~~ communication system according to claim ~~15~~ 26, wherein where the response comprises a message, the receiver module is operable to generate an output comprising the content information.

18. (Currently amended) A ~~client~~ communication system ~~comprising a receiver module~~ according to claim ~~15~~ 26 ~~and~~ wherein the client system comprises a firewall, wherein the message request and the response are permitted to pass through the firewall.

19. (Original) A client system according to claim 18 wherein the message request and response are encoded using HTTP format and wherein the message request comprises an HTTP GET request.

20. (Currently amended) A communication system comprising a message broker according to claim 1 ~~further including~~ and at least one client system.

21. (Currently amended) A ~~message~~ communication system according to claim 20 wherein the message broker and at least one client system are connected via the Internet.

22. (Currently amended) A method of transmitting messages from a first client system to a second client system comprising the steps of

- receiving a message from the first client system encoded in an Internet protocol format and comprising content information and destination information corresponding to a message channel,

- reading the destination information,

- sending a push request to place the content information in a message channel corresponding to the destination information, receiving a message request from the second client system encoded in an Internet protocol format and comprising source information corresponding to the message channel,

- reading the message request to identify the message channel corresponding to the source information,

- sending a pull request to the message channel, and

- generating a response accordingly.

23-24. (Canceled)

25. (New) A communication system comprising a first client system and a message broker for transmitting a message from the first client system to a second client system,

- the message broker comprising at least one message channel, a first channel adapter and a second channel adapter,

- the first channel adapter being operable to;

- receive a message from the first client system encoded in an Internet protocol and comprising content information and destination information,

- read the destination information from the message, and send a push request to place the message in a message channel corresponding to the destination information,

the second channel adapter being operable to;
receive a message request from the second client system encoded in an Internet protocol and comprising source information
read the message request and identify a message channel corresponding to the source information,
send a pull request to the message channel, and
generate a response accordingly,
the first client system further comprising a transmission module operable to transmit the message from the first client system to the message broker, the transmission module being operable to
receive message information comprising content information and destination information corresponding to a message channel,
generate the message comprising the message information encoded in an Internet protocol format, and
transmit the message to the message broker for retrieval by the second client system from the message channel.

26. (New) A communication system comprising a message broker for transmitting a message from a first client system to a second client system, the communication system comprising a second client system,

the message broker comprising at least one message channel, a first channel adapter and a second channel adapter,
the first channel adapter being operable to;
receive a message from the first client system encoded in an Internet protocol and comprising content information and destination information,
read the destination information from the message, and send a push request to place the message in a message channel corresponding to the destination information,
the second channel adapter being operable to;
receive a message request from the second client system encoded in an Internet protocol and comprising source information

read the message request and identify a message channel corresponding to the source information,

send a pull request to the message channel, and
generate a response accordingly,

the second client system comprising a receiver module operable to retrieve the message comprising content information from the message broker sent by the first client system, the receiving module being operable to;

receive a message request comprising source information corresponding to the message channel

generate a message request encoded in an Internet protocol format in accordance with the source information,

transmit the message request to the message broker,

receive the response from said message broker in accordance with the message request, and

generate an output.

27. (New) A communication system comprising a first client system, a second client system and a message broker for transmitting a message from the first client system to a second client system,

the message broker comprising at least one message channel, a first channel adapter and a second channel adapter,

the first channel adapter being operable to;

receive a message from the first client system encoded in an Internet protocol and comprising content information and destination information,

read the destination information from the message, and send a push request to place the message in a message channel corresponding to the destination information,

the second channel adapter being operable to;

receive a message request from the second client system encoded in an Internet protocol and comprising source information

read the message request and identify a message channel corresponding to the source information,

send a pull request to the message channel, and
generate a response accordingly,
the first client system comprising a transmission module operable to transmit the message from the first client system to the message broker, the transmission module being operable to;
receive message information comprising content information and destination information corresponding to a message channel,
generate the message comprising the message information encoded in an Internet protocol format, and
transmit the message to a message broker for retrieval by the second client system from the message channel,
the second client system comprising a receiver module operable to retrieve the message comprising content information from the message broker sent by the first client system, the receiving module being operable to;
receive a message request comprising source information corresponding to the message channel
generate a message request encoded in an Internet protocol format in accordance with the source information,
transmit the message request to the message broker,
receive the response from said message broker in accordance with the message request, and
generate an output.